

SRNT

IUBMB Enzyme Nomenclature

EC 3.2.1.96**Common name:** mannosyl-glycoprotein endo- β -N-acetylglucosaminidase

Reaction: Endohydrolysis of the N,N' -diacetylchitobiosyl unit in high-mannose glycopeptides and glycoproteins containing the $-\text{[Man}(\text{GlcNAc})_2\text{Asn}]$ -structure. One N -acetyl-D-glucosamine residue remains attached to the protein; the rest of the oligosaccharide is released intact

Other names: N,N' -diacetylchitobiosyl β -N-acetylglucosaminidase; endo- β -N-acetylglucosaminidase; mannosyl-glycoprotein endo- β -N-acetylglucosaminidase; di- N -acetylchitobiosyl β -N-acetylglucosaminidase; endo- β -acetylglucosaminidase; endo- β -(1 \rightarrow 4)-N-acetylglucosaminidase; mannosyl-glycoprotein 1,4-N-acetamidoxy- β -D-glycohydrolase; endoglycosidase S; endo- N -acetyl- β -D-glucosaminidase; endo- N -acetyl- β -glucosaminidase; endo- β -N-acetylglucosaminidase D; endo- β -N-acetylglucosaminidase F; endo- β -N-acetylglucosaminidase H; endo- β -N-acetylglucosaminidase L

Systematic name: glycopeptide-D-mannosyl- N^{α} -(N -acetyl-D-glucosaminyl)₂-asparagine 1,4-N-acetyl- β -glucosaminohydrolase

Comments: A group of related enzymes.

Links to other databases: [BRENDA](#), [EXPASY](#), [KEGG](#), [WIT](#), CAS registry number: 37278-88-9

References:

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2. Koide, N. and Muramatsu, T. Endo- β -N-acetylglucosaminidase acting on carbohydrate moieties of glycoproteins. Purification and properties of the enzyme from *Diplococcus pneumoniae*. *J. Biol. Chem.* 249 (1974) 4897-4904. [Medline UI: [74288197](#)]
3. Pierce, R.J., Spik, G. and Montreuil, J. Cytosolic location of an endo- N -acetyl- β -D-glucosaminidase activity in rat liver and kidney. *Biochem. J.* 180 (1979) 673. [Medline UI: [80020233](#)]
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5. Tai, T., Yamashita, K., Ogata-Arakawa, M., Koide, N., Muramatsu, T., Iwashita, S., Inoue, Y. and Kobata, A. Structural studies of two ovalbumin glycopeptides in relation to the endo- β -N-acetylglucosaminidase specificity. *J. Biol. Chem.* 250 (1975) 8569-8575. [Medline UI: [76069208](#)]
6. Tarentino, A.L., Plummer, T.H., Jr. and Maley, F. The release of intact oligosaccharides from specific glycoproteins by endo- β -N-acetylglucosaminidase H. *J. Biol. Chem.* 249 (1974) 818-824. [Medline UI: [74092230](#)]

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